

In the claims

1-15 (Canceled)

16. (Currently Amended) A system for notifying a computing device of an incoming message, the system comprising:

a message server coupled to a data communications network for receiving the incoming message;

a public communications system coupled to the message server, the message server for securely communicating to the communications system that the incoming message awaits retrieval by the computing device; and

a communications line coupled to the communications system and to the computing device, the communications system for signaling the computing device over the communications line that the incoming message awaits retrieval by such computing device,

wherein the incoming message includes a destination address associated with the computing device, and wherein the communications line is identified by an identifier, the system further comprising a database associating the destination address with the identifier, the message server accessing the database and determining the identifier based on the destination address and communicating to the communications system that the incoming message awaits retrieval by the computing device at the communications line as identified by the identifier, ~~and~~

wherein the communications system signals the computing device over the communications line according to a two-way on-hook signaling protocol, the communications device sending data to the communications system according to the two-way on-hook signaling protocol while the communications line is on-hook; and

wherein the communication system signals the computing device over the communications line by providing a recognizable dial tone signal that is different than a regular dial tone signal in response to the computing device periodically and automatically causing the communications line to be off-hook.

17. (Canceled)

18. (Previously Presented) The system of claim 17 wherein the communications system signals the computing device over the communications line according to a protocol based on a Bell 202 modem signaling protocol.
19. (Canceled)
20. (Previously Presented) The system of claim 16 wherein the communications system includes at least a portion of a public switched telephone network (PSTN), wherein the communications line is a telephone line, and wherein the identifier is a telephone number.
21. (Original) The system of claim 16 wherein the communications system includes a secure server and wherein the message server communicates with the secure server of the communications system in an encrypted manner according to a secret shared therebetween.
22. (Original) The system of claim 16 wherein the message server is coupled to a data control network of the communications system.
23. (Original) The system of claim 22 wherein the communications system includes at least a portion of a public switched telephone network (PSTN) which in turn includes at least a portion of an SS7 network, and wherein the message server is coupled to the SS7 network.
24. (Original) The system of claim 16 wherein the incoming message is an e-mail message and the message server is an e-mail server.
25. (Original) The system of claim 16 wherein the communications system includes at least a portion of a public switched telephone network (PSTN).

26. (Original) The system of claim 25 wherein the communications system includes a central office for controlling the communications line.

27. (Original) The system of claim 26 wherein the communications line is a telephone line.

28. (Cancelled)

29. (Original) The system of claim 16 wherein the message server is coupled to an Internet data communications network for receiving the incoming message.

30. (Currently Amended) A method for notifying a computing device of an incoming message, the method comprising:

receiving the incoming message at a message server coupled to a data communications network;

communicating to a communications system coupled to the message server that the incoming message awaits retrieval by the computing device; and

signaling the computing device over a communications line coupled to the communications system and to the computing device that the incoming message awaits retrieval by such computing device,

wherein the incoming message includes a destination address associated with the computing device, and wherein the communications line is identified by an identifier, the method further comprising:

associating the destination address with the identifier in a database; and  
accessing, by the message server, the database to determine the identifier based on the destination address;

the method comprising communicating to the communications system that the incoming message awaits retrieval by the computing device at the communications line as identified by the identifier with the communicating to the communications system including use of encryption based on the identifier, the communications system signaling

the computing device over the communications line according to a two-way on-hook signaling protocol, and

if the computing device is responsive to the two-way on-hook signaling protocol, then the communications device sending data to the communications system according to the two-way on-hook signaling protocol while the communications line is on-hook, the communications system further signaling the computing device over the communications line by providing a recognizable dial tone different than a regular dial tone in response to the computing device causing the communication line to go off-hook, and wherein if the computing device is not responsive to the two-way on-hook signaling protocol, then the computing device periodically and automatically takes the communication line off-hook to detect the recognizable dial tone.

31. (Canceled)

32. (Previously Presented) The method of claim 31 comprising signaling the computing device over the communications line according to a protocol based on a Bell 202 modem signaling protocol.

33. (Canceled)

34. (Previously Presented) The method of claim 30 wherein the communications system includes at least a portion of a public switched telephone network (PSTN), wherein the communications line is a telephone line, and wherein the identifier is a telephone number, the method comprising:

associating the destination address with the telephone number in the database;  
accessing, by the message server, the database to determine the telephone number based on the destination address; and  
communicating to the communications system that the incoming message awaits retrieval by the computing device at the communications line as identified by the telephone number.

35. (Original) The method of claim 30 wherein the communications system includes a secure server, the method comprising communicating to the secure server of the communications system coupled to the message server in an encrypted manner according to a secret shared between the message server and the secure server.

36. (Original) The method of claim 30 comprising communicating to the communications system over a data / control network thereof that the incoming message awaits retrieval by the computing device.

37. (Original) The method of claim 36 wherein the communications system includes at least a portion of a public switched telephone network (PSTN) which in turn includes at least a portion of an SS7 network, the method comprising communicating to the PSTN over the SS7 network thereof that the incoming message awaits retrieval by the computing device.

38. (Original) The method of claim 30 wherein the incoming message is an e-mail message and the message server is an e-mail server, the method comprising:  
receiving the incoming e-mail message at the e-mail server;  
communicating to the communications system that the incoming e-mail message awaits retrieval by the computing device; and  
signaling the computing device that the incoming e-mail message awaits retrieval by such computing device.

39. (Original) The method of claim 30 wherein the communications system includes at least a portion of a public switched telephone network (PSTN), the method comprising communicating to the PSTN that the incoming message awaits retrieval by the computing device.

40. (Original) The method of claim 39 wherein the PSTN includes a central office for controlling the communications line, the method comprising communicating to the central office that the incoming message awaits retrieval by the computing device.

41. (Original) The method of claim 40 wherein the communications line is a telephone line, the method comprising signaling the computing device over the telephone line that the incoming message awaits retrieval by such computing device.

42. (Cancelled)

43. (Original) The method of claim 30 comprising receiving the incoming message at a message server coupled to an Internet data communications network.

44. (Cancelled)

45. (Previously Presented) The system of claim 16 comprising the communications system signaling an email notification message and a corresponding email message to the computing device over the communications line according to a two-way on-hook signaling protocol.

46. (Cancelled)

47. (Currently Amended) The method of claim 30 comprising the communications system signaling ~~an email notification message and a corresponding~~ email message to the computing device in addition to the email notification message over the communications line according to [[a]] the two-way on-hook signaling protocol when the computing device is responsive to the two-way on-hook signaling protocol.